

WHAT IS CLAIMED IS:

1. An organic synthesis reaction vessel in the form of a single hollow tube as a whole, comprising;
- 5 a horizontal part;
- a vertical part formed by bending upward from an end of the said horizontal part;
- an inlet formed by bending upward from the other end of the said horizontal part;
- 10 an outlet formed by bending the upper part of the said vertical part in parallel with the said horizontal part in the opposite direction to the said inlet and engaged with a connection joint;
- and a filter mounted within one end of the said horizontal part or the said vertical part.
- 15 2. The organic synthesis reaction vessel of the claim 1 wherein the filter is a organic solvent resistant filter.
3. A block device for reaction vessels, comprising;
- a hexahedral frame whose front is capable of getting closed or opened;
- a block contacting with the inner face of the rear side and inner faces of
- 20 both sides of the said frame without a gap and having a vacuum passage going through both sides of the said frame horizontally; a plurality of cock grooves formed in the upper part in a specific intervals and depth; connection joint insertion grooves formed in the front part in the same intervals with the said cock grooves so

5 a plurality of cocks having the connection joint insertion groove, the said small vacuum tube, and a first and a second passage connecting the said connection joint insertion groove and the said outlet respectively, and rotating after inserted into the said cock grooves without a gap;

a catch projection extending from the said vacuum passage in the outside of

a catch groove capable of closely engaging with the said catch projection and stopper without a gap in the other side which is connected to the said catch projection by the vacuum passage.

15 4. The block device for reaction vessels of the claim 3 wherein the frame further comprises a cover having a hole capable of blowing gases into in the upper face of the frame.

20 5. A method for synthesizing a compound or a library of compounds by using the organic synthesis reaction vessel of the claim 1 or 2 and the block device for reaction vessels of the Claim 3 or 4.

6. The method of the claim 5 wherein the compound is a peptide.

7. The method of the claim 5 wherein the compound is a oligonucleotide.